## -21-ABSTRACT

Lithographic Apparatus, Device Manufacturing Method, and Device Manufactured Thereby

On-the-Fly leveling in a lithographic apparatus is conducted using a setpoint derived by filtering the output of the combination of the output of a level sensor and another position sensor (LVDT or IFM). The level sensor may include look-ahead. The filter may be a low pass filter to cut-off level variations of wavelength shorter than the width of the slit during a scanning exposure. The filter may also be selected to reduce cross-talk between tilt movements and horizontal displacements.

Fig. 3

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